

Remarks:

Applicant appreciatively acknowledges the Examiner's confirmation of receipt of Applicant's claim for priority and certified priority document under 35 U.S.C. § 119(a)-(d).

Reconsideration of the application, as amended herein, is respectfully requested.

Claims 69 - 122 are presently pending in the application. Claims 35 - 68, previously added by preliminary amendment filed on June 15, 2001, have been canceled. New claims 69 - 122 have been added

In item 4 of the above-identified Office Action, the originally filed drawings were objected to because the informal drawings were not of sufficient quality to permit examination. A shortened period of response was set in which to submit legible replacement sheets for the originally filed drawings. On November 10, 2004, Applicant filed the requested replacement sheets with the Patent Office. It is believed that the filing of these replacement sheets on November 10, 2004, addressed the issues raised in paragraph 4 of the Office Action, to which the shortened statutory period applied and, as such, the replacement sheets were timely filed.

In item 5 of the Office Action, the drawings were objected to as allegedly failing to comply with 37 CFR 1.84(p)(4) because reference characters, as an example, 4, 5, 6, and 7 have been used to designate different columns (rows of the second dimension). However, the repeated use of the reference characters is to designate "like items" in the drawings. For example, on page 50 of Applicant's substitute specification, lines 11 - 17, with regard to the dual use of reference character 4, it is stated:

"First of all, **two rows** in a first dimension 4 are defined, to which the designations of the objects inst_1 and inst_2 are assigned. In the second dimension 3, the rows are assigned to a second dimension 5 for internal links. Designations 8 for the various internal interfaces are now entered in the resultant intersection cells 7." [emphasis added by Applicant]

Because the like reference numbers are used to designate like items in the drawings, Applicant believes the usage to be correct, and no amendments have been made at this time.

In item 6 of the Office Action, the drawings were further objected to because reference characters 7 and 8 were allegedly used to reference the same cell. The specification of the instant application, on page 20, lines 47 - 52, makes clear that the reference numeral 7 refers to the **cell itself**, while the reference numeral 8 refers to **a designation entered**

in the cell 7. It is additionally believed that the drawings filed on November 10, 2004, make the above distinction clear.

In item 7 of the Office Action, it was stated that "[the] drawings and descriptions are not clear". It is believed that the replacement sheets filed on November 10, 2004 and the present amendments make the drawings and descriptions even more clear.

In item 8 of the Office Action, it was noted that the specification needs to be double spaced. In item 9, it was requested that new application papers with lines double spaced and on good quality paper be filed. Applicant is filing herewith under 37 CFR § 1.125(a), a double spaced substitute specification, excluding the claims of the instant application. Pursuant to Section 608.1(q) of the MPEP, the present substitute specification includes, without markings, the amendments made in the Preliminary Amendment of June 15, 2001, in the instant case. Additionally, certain typographical and spelling errors have been corrected, which corrections are included in the clean copy of the Substitute Specification, as well as are particularly shown on an interlineated copy of the Substitute Specification, included herewith. No new matter has been added by way of these

amendments, and a Statement to the same is being filed herewith.

In item 10 of the Office Action, it was noted that the Abstract should be limited to 150 words. In the Preliminary Amendment of June 15, 2001, filed in the instant case, the Abstract was amended and cut down to 143 words. A clean copy of that amended Abstract was included as the last page of the Preliminary Amendment filed on June 15, 2001. The Abstract, as amended in the Preliminary Amendment, is included with the Substitute Specification filed simultaneously herewith.

In items 11 - 14 of the Office Action, claims 35, 51, 64, 65, 66, 67 and 68 were objected to for various informalities. It is believed that these objections have been mooted by the cancellation of claims 35, 51 and 64 - 68 - 68, from the present case.

In items 16 - 18 of the Office Action, claims 38 - 42, 52 - 56, 59 - 65 and 69 were rejected under 35 U.S.C. § 112, second paragraph, for allegedly lacking sufficient antecedent basis for certain limitations. It is believed that these objections have been mooted by the cancellation of claims 8 - 42, 52 - 56, 59 - 65 and 69, from the present case.

In item 20 of the Office Action, claims 59 - 68 were rejected under 35 U.S.C. § 101, as allegedly being directed to non-statutory subject matter. It is believed that these objections have been mooted by the cancellation of claim 59 - 68, from the present case. Additionally, whereas Applicant's original claim 25 and former claim 59 recited "an intermediate format table", Applicant's new claim 105, explicitly recites an "apparatus comprising a computer system to create an intermediate format table". That an apparatus comprising a computer system is used to create an intermediate format table is supported in the instant application on page 8 of the substitute specification, lines 13 - 24. As such, it is believed that the newly added claims are directed towards statutory subject matter.

In item 22 of the Office Action, claims 35 - 68 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U. S. Patent No. 5,513,119 to Moore et al ("**MOORE**").

Applicant respectfully traverses the above rejection, as applied to the new claims.

More particularly, claims 69 - 122 are presently pending in the application. Claims 35 - 68, previously added by preliminary amendment filed on June 15, 2001, have been

canceled. The new claims correspond to a set of claims in the granted German patent and are supported by Applicant's originally filed patent application. More specifically, the newly added claims are based on and/or supported by the originally filed claims, as follows:

New Claim(s):	Original Claim:	New Claim(s):	Original Claim:
69, 70, 71	1	92	18
72	2	93, 94	19
73	3	95, 96, 97	20
74	4	98	21
75, 77	5	99, 100, 101, 102	22
76, 78	6	103	23
79	7	104	24
80, 81	8	105, 106, 107, 108, 109	25
82	9	110	26
83	10	111	27
84	11	112, 114, 115	28
85	12	113	29
86	13	116	30
87	14	117, 118	31
88	15	119	32
89	16	120, 121	33
90, 91	17	122	34

Applicant's independent claims 69, 90 and 105 are based on Applicant's originally filed claims 1, 17 and 25, respectively. Applicant's claims are believed to be patentable over the MOORE reference, cited in the Office Action.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Applicant's new claim 69 recites, among other limitations, a method for converting interface definitions within a source code program into an intermediate format. The intermediate format created by the method of Applicant's claim 69 is in the form of an intermediate format table, in which the interface information is arranged in a structured and consistent way. For example, Applicant's claim 69 recites, among other limitations:

"creating an at least two-dimensional intermediate format table with cells at the intersections of rows disposed in a first dimension and rows disposed in a second dimension;"

New independent claims 90 and 105 include similar limitations to those in Applicant's new claim 69. The intermediate format table created as described in new claim 69 is easily understandable by a user, can easily be visually inspected, and the interface information contained in the intermediate format table can easily be altered, for example corrected, by a user. Therefore, an operator or a programmer can easily check and change the intermediate format, for example eliminate errors, which is not possible to this extent when using no intermediate format at all or an intermediate format in the form of block diagrams according to the prior art. Contrary to the statement made on page 15 of the Office Action, **placement of data in one cell or another is not irrelevant.** The importance of Applicant's particularly

claimed intermediate format table, is discussed in the instant application on page 16 of the substitute specification, lines 15 - 25, which states:

"The method according to the invention leads to an intermediate format table which contains all the interface definitions which are contained in a program code in a data format which is clearly broken down and is accessible in a standard manner by other conversion programs. The two-dimensional representation also allows an operator or programmer to visually inspect the resultant intermediate format, thus providing an intervention capability, in a simpler way than would be possible without any intermediate format or by using a conventional representation with block diagrams."
[emphasis added by Applicant]

The **MOORE** reference discloses a hierarchical floor planner for gate array design layout, wherein a user interface allows a user to interact with a placement of the system. See, **MOORE**, Abstract. In **MOORE**, the system reads the input design files to create a database used for placing desired input/output buffers and for hierarchically grouping the cells and placing the groups. The user of **MOORE** is allowed to move the buffers and groups to any valid locations within the integrated circuit.

Moore is directed to a placement system for layout of integrated circuits. As such, **MOORE** is directed to a completely different concept and purpose than that of Applicant's claims, which relate to the area of the translation between hardware description languages. In

particular, **MOORE** does not disclose the creation of an intermediate format table containing interface information. The database created in **MOORE**, contains information about an integrated circuit and might thus also contain information about interfaces of the integrated circuit, but the database of **MOORE** is a representation of data used internally in a computer system. The format of the database of **MOORE** is neither suitable nor intended for visual inspection by a user. See **MOORE**, col. 1, line 64 - col. 2, line 3, which states:

"In response to design files supplied by a user, the placement system creates a database, which defines the design elements and the design area. Using the database, the placement system may display the integrated circuit with input/output buffers used for connecting the design elements within the integrated circuit with circuitry outside the design area. The user can select the required input/output buffers and move them to desired locations with respect to input/output pins of the integrated circuit. The groups of the design elements are placed on the integrated circuit based on the size of each group." [emphasis added by Applicant]

The database in **MOORE** is not created in a format, as claimed by Applicant's, because it is not needed to be viewed by the user. Rather, the placement system of **MOORE** uses the database to present the user with a graphical display of the elements represented by data in the database, but not the database itself. Because databases are typically stored in a compressed format such that only little memory is necessary for storing the data base, the format is typically unreadable

by a user. The database created in **MOORE** is thus no means to allow a user to visually inspect interface information and to easily change interface information.

This is a consequence of the difference between the purpose of the creation of the database according to **MOORE**, which is to store information in the context of a placement system, and the purpose of the creation of the intermediate format table according to new claim 69, which is to provide an intermediate format in the context of translation interface definitions which is easily changeable and readable by a user. In consequence thereof, **MOORE** doesn't teach or suggest, creating an **intermediate format table** as particularly claimed by Applicant. There is no teaching or suggestion in **MOORE** to generate **the database of MOORE**, not the resulting graphical layout shown to the user, but the database, in a format as claimed by Applicant.

MOORE also describes a graphical user interface allowing a user to provide feedback. The graphical user interface allows a user, for example by point and click, to place design elements on a design area of an integrated circuit. See col. 2 of **MOORE**, lines 3 - 7. The graphical representation of a design area to allow a user the input of commands for placement of design elements is something different than an

intermediate format allowing the conversion of interface definitions from one hardware description language to another. As such, **MOORE** would neither teach, nor suggest, to a person of skill in the art to create an intermediate format table as claimed in Applicant's new claims.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of Applicant's independent claims 69, 90 and 105. Claims 69, 90 and 105 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 69, 90 or 105.

In view of the foregoing, reconsideration and allowance of claims 69 - 122 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

Additionally, please consider the present as a petition for a three (3) month extension of time, and please provide a three

Applic. No. 09/680,370
Response Dated March 10, 2005
Responsive to Office Action of September 10, 2004

(3) month extension of time, to and including, March 10, 2005,
to respond to the present Office Action.

The extension fee for response within a period of three (3)
months pursuant to Section 1.136(a) in the amount of \$1,020.00
in accordance with Section 1.17 is enclosed herewith.

Please provide any additional extensions of time that may be
necessary and charge any other fees that might be due with
respect to Sections 1.16 and 1.17 to the Deposit Account of
Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,



For Applicant

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KPS:cgm

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